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Sean F. Mellino

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Detlef P. Müller-Schulte
Serial No. :
Filing Date : Herewith
Examiner :
Group Art Unit:
Title : Luminescent, Spherical, Non-Autofluorescent Silica Gel
Particles With Changeable Emission Intensities and
Emission Frequencies (as amended herein)
Attorney File : RO0909US (#90568)

Mail Stop PCT
Commissioner for Patents
P O Box 1450
Alexandria, Virginia, 22313-1450

U S PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name
/UJ/	3,853,987	12/10/74	Dreyer
	3,996,345	12/7/76	Ullman, et al.
	3,998,943	12/21/76	Ullman
↓	4,035,316	7/12/77	Yen, et al.

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/UJ/	4,105,598	8/8/78	Yen, et al.
	4,108,972	8/22/78	Dreyer
	4,174,384	11/13/79	Ullman, et al.
	4,199,559	4/22/80	Ullman, et al.
	4,224,198	9/23/80	Rembaum, et al.
	4,261,968	4/14/81	Ullman, et al.
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	4,777,123	10/11/88	Yamada, et al.
	5,043,265	8/27/91	Tawke, et al.
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	5,251,018	10/5/93	Jang, et al.
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	5,585,640	12/17/96	Huston, et al.
↓	5,674,698	10/7/97	Zarling, et al.

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↓	6,326,144	12/4/2001	Bawendi, et al.

Foreign Patent Documents

Examiner Initial	Document Number	Date	Country	Translation (Yes/No)
/UJ/	WO 99/01766	1/14/99	WO	No
/UJ/	WO 02/09125	1/31/2002	WO	No
/UJ/	BR 1439031 **	6/6/1976	GB	
/UJ/	DE 24 26 919 A	1/2/76	DE	No

Other Prior Art (Inc. Author, Title, Date, Pertinent Pages, Etc)

Examiner Initial	Document
/UJ/	Oi, et al., <u>J. Cell. Biol.</u> , Vol. 93: 891 (1982) **
/UJ/	Kaplan, et al., <u>Biochimica et Biophysica Acta</u> , Vol. 728: 112 (1983) **

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Examiner

/Unsu Jung/

Date Considered:

03/30/2007

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant

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Attorney Docket RO0909US (#90568)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE CITATION

In re application of: Detlef P. Müller-Schulte

Serial No: 10/509,712 / Conf. No. 2617

Group No.: 1645

Filed: September 30, 2004

Examiner: __

For: LUMINESCENT, SPHERICAL, NON-AUTOFLUORESCENT SILICA GEL
PARTICLES WITH CHANGEABLE EMISSION INTENSITIES AND
EMISSION FREQUENCIES (per Prelim. Amd. mld. 9/30/2004)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Foreign Patent Documents

Examiner Initial	Document Number	Date	Country	Translation (Yes/No)
<u>/UJ/</u>	WO 99/01766	1/14/99	PCT	(Abstract & claim 1)
<u>/UJ/</u>	WO 02/09125	1/31/2002	PCT	(Abstract)
<u>/UJ/</u>	1 439 031 (Previously identified as BR1439031)	06/09/1976	GB	(English)
<u>/UJ/</u>	24 26 919	1/2/76	DE	Claim 1

Other Prior Art (Inc. Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initial	Document
<u>/UJ/</u>	Oi, et al., "Fluorescent Phycobiliprotein Conjugates for Analyses of Cells and Molecules," <u>J. Cell. Biol.</u> , Vol. 93: 981 (1982)

- /UJ/ Kaplan, et al., "The Selective Detection of Cell Surface Determinants by Means of Antibodies and Acetylated Avidin Attached to Highly Fluorescent Polymer Microspheres," Biochimica et Biophysica Acta, Vol. 728: 112 (1983)
- /UJ/ Lianos, et al., "Cadmium sulfide of small dimensions produced in inverted micelles," Chem. Phys. Lett., Vol. 125: 299 (1986) **Abstract only**
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- /UJ/ Kortan, et al., J. Am. Chem. Soc., "Nucleation and Growth of CdSe on ZnS Quantum Crystallite Seeds, and Vice Versa, in Inverse Micelle Media," Vol. 112: 1327 (1990)
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- /UJ/ Colvin, et al., "Light-emitting diodes made from cadmium selenide nanocrystals and a semiconducting polymer," Nature, Vol. 370: 354 (1994)
- /UJ/ Chang, et al., "Preparation and Properties of Tailored Morphology, Monodisperse Colloidal Silica - Cadmium Sulfide Nanocomposites," J. Am. Chem. Soc., Vol. 116: 6739 (1994)
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- ~~Hampl, et al., "Upconverting Phosphor Reporters in Immunochromatographic Assays," Anal. Biochem, Vol. 288: 176 (2001)~~
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- ~~Dave et al., "Sol-gel matrices for protein entrapment," Immobilized Biomolecules in Analysis **~~

Examiner:

Date Considered:

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03/30/2007

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